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Project

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TITLE

STATUS OF MOUNTAIN PINE BEETLE ACTIVITY IN WESTERN WHITE PINE ON  
THE CLEARWATER NATIONAL FOREST AND ON INCLUDED AND ADJOINING LANDS  
IN 1946

FILE COPY

MISSOULA  
FOREST INSECT  
LABORATORY

Forest Insect Laboratory

Coeur d'Alene, Idaho

Status of Mountain Pine Beetle Activity in Western White Pine on  
the Clearwater National Forest and on Included and Adjoining Lands  
in 1946

In the early summer of 1946 an extensive survey of the status of mountain pine beetle infestation was made in white pine stands in and adjoining the Clearwater National Forest. Two areas were found to warrant an intensive survey and that was carried out. Data for the areas is given in the succeeding pages.

Mussel Shell Unit

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
80	531	6291	0
Attacks per acre	0		
Percent of stand killed	0		
Infested trees on unit	0		

The white pine timber stands in this unit were practically free from insect infestation.

There is an infestation in the douglas fir in the unit as a whole. Groups of 20 to 30 are noticeable in the area southeast of Mud Creek L.O. In other drainages, groups of 4 and 5 can be seen.

Hollywood Unit (Douglas Fir)

Acres of sample	Green Stand		Attacks
	Douglas Fir	Mixed	
4.2	102	92	13
Attacks per acre	.309		
Percent of stand killed	11.30		
Infested trees on unit	108		

A concentrated infestation of douglas fir occurs in approximately 35 acres in section 2 and 3, R5E-T47N. A few infested trees are scattered generally throughout the area, but a concentrated infestation of 35 near the Section line 2-3 has approximately, 110 attacked trees.

### Little Wietas Unit

No sample plots were taken in this unit because of inaccessability due to bad roads. The area was observed from a distance and no red-tops were noticed. It is believed that this unit has only a normal infestation.

### Orogrande Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
73.4	3858	4249	6
Attacks per acre		.081	
Percent of stand killed		.16	
Infested trees on unit		1,817	

The infestation in this unit is concentrated in the Orogrande drainage from Mill Creek to Tamarack Creek and in the area around the old Oxford R. S. The White Pine stand is predominantly overmature with many trees dying of the tops. At the present time, the infestation is not serious but the attacks may increase in future years.

### Springs Creek.

Acres of sample	Green Stand		Attacks
	White pine	Mixed	
8	93	370	0
Attacks per acre		0	
Percent of stand killed		0	
Infested trees on unit		0	

While no infestation was found on sample plots in this unit, a few attacks were noticed in the area. However, not enough to be of any serious consequence.

### Cedars Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
73	1282	3525	5
Attacks per acre		.068	
Percent of stand killed		.41	
Infested trees on unit		1700	

The timber stands in the Cedars unit are overmature and heavily mixed with spruce and Cedars. The past loss in both the white pine and spruce stands have been heavy.

From the data of preliminary survey, two areas were determined to have a serious enough infestation to warrant an intensive survey. These were the North Fork of the Clearwater River from the Cedars Station to Fix Creek and Independence Declaration Gulch which are listed under intensive survey.

### Bates-Sneak Creek Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
26.4	650	1206	0
Attacks per acre	0		
Percent of stand killed	0		
Infested trees on unit	0		

While no infestation was found on sample plots, a few attacks were noticed in the area although there was nothing of a serious nature.

### Butte Creek Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
10	206	605	0
Attacks per acre	0		
Percent of stand killed	0		
Infested trees on unit	0		

The white pine stand in this unit is young, heavily stocked. No serious infestation is in progress although there are a limited number of scattered infested trees in the area.

Along the higher ridges, the Douglas fir is infested by the Douglas fir beetle and several groups were noticed in that area.

#### Isabella Creek Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
18	200	933	0
Attacks per acre	0		
Percent of stand killed	0		
Infested trees on unit	0		

The white pine stand in the Isabella Creek drainage is large, over-mature with many trees dying at the tops. No infestation was found in the area nor were any red tops noticed.

#### Sourdough Creek Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
16	415	1098	1
Attacks per acre		.05	
Percent of stand killed		.24	
Infested trees on unit		234	

A light infestation is in progress in the Beaver Creek drainage near the Forest Boundary. The area has been partially logged and the remaining pine is young and should be able to withstand attacks by mountain pine beetle.

#### Sheep Mtn. Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
	1024	106	
Attacks per acre	0		
Percent of stand killed	0		
Infested trees on unit	0		

The predominant type in this stand is white pine with a ratio of almost two to one. While no infestation was recorded from sample plots, a few red tops were noticed in the area. There has been a decided decrease in the infestation in this area of the national forest.

Logging operation on the land near the Forest Boundary probably account for this decrease.

#### Deadhorse Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
26	812	1245	0
Attacks per acre	0		
Percent of stand killed	0		
Infested trees on unit	0		

No infestation was noted in this unit although a few red tops were noticed in the area. Several large groups of infested Douglas fir were in the unit.

#### North Fork of the Clearwater River Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
104	2523	3107	18
Attack per acre		.17	
Percent of stand killed		.708	
Infested trees on unit		1700	

The data from an intensive survey in this unit shows an infestation of .17. The stand is overmature with many trees dying from overmaturity.

The attacked trees occur singly and in groups of two and three and are scattered on the side hills on both sides of the river. The infested trees are attacked heavily and usually contain heavy broods.

Independence - Declaration Gulch Unit.

Acres of sample	Green Stand		Attacks
	White Pine	Mixed	
83	2055	4148	8
Attacks per acre		.096	
Percent of stand killed		.38	
Infested trees on unit		720	

This unit includes the area in the upper ends of the Independence and Declaration Gulchs.

An infestation of 0.096 was found from 83 acres of sample plots. These attacked trees occurred generally throughout the area although the heaviest concentration was in the upper end of Independence Creek.

The white pine is mostly large, and overmature with many trees dying from average. Top deterioration is apparent in a large percentage of the trees.

The percentage of stand killed has decreased .13 since 1945.

# CLEARWATER NATIONAL FOREST

UNIT	ACRES	INFESTED TREES PER ACRE	INVESTED TREES ON UNIT	PERCENT OF STAND KILLED
<u>PRELIMINARY</u>				
Mussel Shell	56,000	0	0	0
Hollywood (Douglas fir)	640	3.09	108	11.3
Little Vistas		0	0	0
Orogrande	22,440	.081	1,817	.16
Springs Creek	2,500	0	0	0
Cedars	25,000	.068	1,700	.41
Rates-Sneak Creek	7,800	0	0	0
Butte Creek	1,600	0	0	0
Isabella Creek	3,000	0	0	0
Sourdough Creek	4,500	.052	234	.24
Sheep Mtn.	2,800	0	0	0
Deadhorse	1,300	0	0	0
<u>INTENSIVE SURVEY</u>				
North Fork of the Clearwater River	10,000	.17	1,700	.71
Independence - Declaration Gulch	7,500	.096	720	.38